SEQUENCE LISTING

<110> Roche Vitamins AG

<120> DNA encoding FAD dependent D-erythronic acid 4-phospohate dehydrogenase involved in vitamin B6 biosynthesis

<130> sequence for pdxR (case19)

<140>

<141>

<160> 4

<170> PatentIn Ver. 2.1

<210> 1

<211> 1491

<212> DNA

<213> Sinorhizobium meliloti

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<212> PRT

<213> Sinorhizobium meliloti

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IIc Val Gly Pro Gly Asn Ala Leu Thr Ala Pro Ala Asp Thr Ala Pro
35 40 45

Tyr Leu Val Glu Scr Arg Gly Leu Tyr Arg Gly Thr Thr Pro Leu Val 50 55 60

Leu Arg Pro Gly Ser Val Glu Glu Val Ser Leu Val Met Arg Leu Ala 65 70 75 80 .

Ser Gln Thr Arg Thr Ala Val Val Pro Gln Gly Gly Asn Thr Gly Ilis
85
90
95

Val Ala Gly Gln Ile Pro Arg Glu Gly Lys Ala Asp Val Val Leu Ser 100 105 110

Leu Glu Arg Leu Asn Arg Ile Arg Asp Ile Asp Pro Val Gly Asn Val 115 120 125 Ile Val Ala Asp Ala Gly Cys Ilc Leu Ala Asp Ile Gln Lys Ala Ala 130 135 140

Asp Asp Val Asp Arg Leu Phe Pro Leu Ser Leu Gly Ser Glu Gly Ser 145 155 160

Ala Arg Ile Gly Gly Asn Leu Ser Thr Asn Ala Gly Gly Thr Ala Val

Leu Ala Tyr Gly Asn Met Arg Gln Leu Cys Leu Gly Leu Glu Val Val
180 185 190

Leu Pro Thr Gly Glu Ile Trp Asp Gly Leu Arg Arg Leu Arg Lys Asp 195 200 205

Asn Thr Gly Tyr Asp Leu Arg Asp Leu Phe Ile Gly Ala Glu Gly Thr 210 215 220

Leu Gly Val Ile Thr Gly Ala Val Leu Lys Leu Phe Pro Lys Pro Arg 225 230 235 240

Gly His Gln Val Ala Phe Ala Gly Leu Arg Ser Val Glu Asp Ala Leu 245 250 255

Thr Leu Phe Asp Arg Ala Thr Ser Val Cys Gly Pro Ala Leu Thr Gly 260 265 270

Phe Glu Leu Mct Pro Arg Leu Gly Ile Glu Phe Thr Thr Arg His Ile 275 280 285

Ala Gly Val Arg Asp Pro Met Glu Thr Thr His Pro Trp Tyr Ala Leu 290 295 300

Ilc Asp Ile Ser Thr Ser Asp Thr Ala Glu Ser Ala Glu Arg Met Val 305 310 315 320

Gin Asp Leu Leu Giu Ala Val Ilc Ala Asp Gly Leu Val Giu Asp Ala 325 330 335

Val Ile Ala Gln Asn Glu Ala Gln Arg Arg Ala Leu Trp His Met Arg

340 345 350

Glu Ser Met Ser Pro Ala Gln Lys Pro Glu Gly Gly Ser Ile Lys His 355 360 365

Asp Val Ser Val Pro Val Ser Ser Ile Pro Ala Phe Met Thr Glu Ala 370 375 380

Asp Ala Leu Val Ser Lys Ala Ile Pro Gly Ala Arg Ile Cys Ala Phe 385 390 395 400

Gly His Met Gly Asp Gly Asn Ile His Tyr Asn Ile Ser Gln Pro Val 405 410 415

Gly Ala Asp Lys Gln Ser Phe Leu Asp Arg Trp Arg Glu Ile Asn Ala 420 425 430

lle Val His Ala Val Val Leu Lys His Asp Gly Ser Ile Scr Ala Glu 435 440 445

His Gly Ile Gly Gln Leu Lys Arg Asp Glu Leu Ala Ala Ilc Arg Ser 450 455 460

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<223> Description of Artificial Sequence: an artificially

synthesized primer sequence

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:an artificially synthesized primer sequence

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